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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/615,178	07/08/2003	Douglas A. Soller	J-3862	1887
28165	7590	03/21/2006	EXAMINER	
S.C. JOHNSON & SON, INC. 1525 HOWE STREET RACINE, WI 53403-2236			GUIDOTTI, LAURA COLE	
			ART UNIT	PAPER NUMBER
			1744	

DATE MAILED: 03/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/615,178

Applicant(s)

SOLLER ET AL.

Examiner

Laura C. Guidotti

Art Unit

1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 2-10, 12-21, 24-36 and 45-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13, 14, 17, 18 and 24-36 is/are allowed.
- 6) ☒ Claim(s) 2-10, 12, 15, 16, 19-21 and 45-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 27 December 2005 has been entered.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 2-5, 10, 12, and 47 are rejected under 35 U.S.C. 102(b) as being anticipated by Allaire et al., USPN 3,827,099.

Allaire et al. disclose the claimed invention including a brush head comprising a plurality of layers (22) of a water-degradable material (paper; Column 3 Lines 15-17) positioned on top of each other to form a stack of such layers (20), wherein at least three of the layers are formed from a sheet of the water-degradable material that has

been folded back upon itself in switchback accordion fashion along a first fold line a first time and then again back upon itself in an opposed direction along a second fold line a second time (Figure 5; Column 2 Lines 61-65), and wherein the head is configured such that a first end of the stack is held together by the brush head (18) and an opposed end of the stack can spread out between at least some of the layers of the stack and wherein the first fold line is located at the opposed end of the stack (as shown in Figure 5). A water dissolvable attachment means (glue, which is an adhesive, stitches or staple; Column 2 Lines 34-37 states that glue, stitches, and staples are known manners of securing paper strips to a support) has been applied to the brush head adjacent the first end of the stack to assist in holding that end of the stack together while still allowing at least a part of the opposed end of the stack to be spread out between layers (Column 2 Lines 65-66; Figure 5). The layers are formed with bristle segments adjacent the opposed end of the stack (Column 2 Lines 66-68; see Figures). The brush head comprises between four and forty layers of material in the stack (see Figure 5). The attachment means comprises no more than one-third of the head axial length (see Figures).

3. Claims 2-3, 5, 10, 12, 15-16, and 47 are rejected under 35 U.S.C. 102(e) as being anticipated by Young, USPN 6,978,508.

Young discloses the claimed invention including a brush head comprising a plurality of layers (43) of a water-degradable material (Column 4 Lines 19-22, 26-35; Column 3 Line 41 to Column 4 Line 13) positioned on top of each other to form a stack of such layers (Figure 8), wherein at least three of the layers are formed from a sheet of

Art Unit: 1744

the water-degradable material that has been folded back upon itself in switchback accordion fashion along a first fold line a first time and then again back upon itself in an opposed direction along a second fold line a second time (Figures 8-9; Column 4 Lines 14-25), and wherein the head is configured such that a first end of the stack is held together by the brush head (mop holding fixture; Column 4 Lines 17-19) and an opposed end of the stack can spread out between at least some of the layers of the stack and wherein the first fold line is located at the opposed end of the stack (as shown in Figures 8-9). The water-dissolvable attachment means that is applied to the brush head adjacent the first end of the stack to assist holding that end of the stack together while still allowing at least a part of the opposed end of the stack to spread about between layers are stitches (48; Column 4 Lines 34-35). The plurality of layers are formed with bristle segments adjacent the opposed end of the stack (see Figure 8). The brush head comprises between four and forty layers (see Figure 8). The layers of the brush head comprise at least two plies of water-degradable material (45, 46). The water-degradable material is a nonwoven fibrous web of cellulosic material that is hydroentangled (Column 4 Lines 11-13). The attachment means comprises no more than one-third of the head axial length (see Figure 8).

4. Claims 2-6, 10, 12, 21, and 47 are rejected under 35 U.S.C. 102(b) as being anticipated by Marquart et al., USPN 4,441,228.

Marquart et al. disclose the claimed invention including a brush head comprising a plurality of layers (20, 42) of a water-degradable material (paper; Column 3 Lines 59-61) positioned on top of each other to form a stack of such layers (see Figures), wherein

at least three of the layers are formed from a sheet of the water-degradable material that has been folded back upon itself in switchback accordion fashion along a first fold line a first time and then again back upon itself in an opposed direction along a second fold line a second time (see Figures; Column 2 Line 62 to Column 3 Line 2), and wherein the head is configured such that a first end of the stack is held together by the brush head (15, 43) and an opposed end of the stack can spread out between at least some of the layers of the stack and wherein the first fold line is located at the opposed end of the stack (as shown in Figures 1-4). Water-dissolvable attachment means such as adhesive, stitching, or ultrasonic welding have been applied to the brush head adjacent the first end of the stack while allowing at least a part of the opposed end of the stack to spread out between layers (see Figures; Column 2 Lines 45-51). The layers are held together, regarding pressure bonding "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985) (MPEP 2113). A plurality of the layers are formed with bristle segments adjacent the opposed end of the stack (see Figures). The brush head comprises between four and forty layers of such water degradable material in the stack (see Figures). The water dissolvable means may be an adhesive (Column 2 Lines 49-51) and there is a separate water-dissolvable cover positioned over a portion of the

Art Unit: 1744

brush head to which the adhesive has been applied (cardboard pouch or backing; Column 3 Lines 3-6). The attachment means comprises no more than one-third of the head axial length (see Figures).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 1744

5. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allaire et al., USPN 3,827,099, as applied to claim 2, in view of Tames, USPN 4,523,347.

Allaire et al. disclose all elements above, however do not disclose that the brush head has been at least partially impregnated with a chemical composition.

Tames discloses a disposable floor mop that comprises a plurality of layers of a water-degradable material, such as paper, being impregnated with a chemical composition that is a surfactant such as soap or detergent that does not include water (Column 2 Lines 44-46; Column 4 Lines 1-3; Column 1 Lines 20-29).

It would have been obvious for one of ordinary skill in the art to modify the paper layers of Allaire et al. to be impregnated with a chemical composition, as Tames teaches, so that the user has no need for storing cleaning chemicals separate from the mop.

6. Claims 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allaire et al., as applied to claim 2, in view of Trenz et al., USPN 6,745,427 in further view of Strader, USPN 2,813,286.

Allaire et al. discloses all elements above, however does not include a storage device of a sealed pouch that does not contain more than one brush head.

Trenz et al. disclose a water-dissolvable sealed pouch for storing a disposable brush head (3; Column 2 Lines 43-48) that does not contain more than one brush head (Column 3 Lines 13-15). The pouch of Trenz et al. appears to have a circumference (see Figure 1), however does not disclose a circumferential pouch tear line.



Strader discloses storage pouches for storing disposable cleaning brush heads (Figure 5, 17; Column 3 Lines 4-39), including a circumferential pouch tear line (25; Column 3 Lines 19-22).

It would have been obvious for one of ordinary skill in the art to dispense and store disposable or renewable brush heads, such as those disclosed by Allaire et al., in individual packing, as Trenz et al. teach, in order to conveniently use one brush head while unused heads remain protected, and it would have been obvious for one of ordinary skill in the art to further modify the pouch of Trenz et al. to include a circumferential tear line, as Strader teaches, so that a disposable brush head may be released from its packaging.

7. Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over Young, USPN 6,978,508 as applied to Claim 2, in view of Hagelberg, USPN 4,031,673.

Young discloses all elements above, however do not include at least one layer of water-degradable material that is abrasive.

Hagelberg discloses a toilet bowl cleaning device that has at least one layer of the water-degradable material is abrasive (26; Column 2 Lines 24-29, Column 4 Lines 13-21).

It would have been obvious for one of ordinary skill in the art to modify at least one layer of Young to include abrasive properties, as Hagelberg teaches, in order to more thoroughly clean and scrape surfaces of a toilet bowl.

Art Unit: 1744

8. Claim 46 is rejected under 35 U.S.C. 103(a) as being unpatentable over Young, USPN 6,978,508 and Hagelberg, USPN 4,031,673, as applied to Claim 45, in further view of Sorrell, USPN 6,368,003.

Young and Hagelberg disclose all elements above, however do not include at least one abrasive layer of water-degradable material that is apertured.

Sorrell provides a cleaning device that uses an apertured material to provide abrasiveness for cleaning (Column 2 Lines 35-39, wherein "mesh" is the apertured material, see Figures).

It would have been obvious for one of ordinary skill in the art to modify the abrasive material of Young and Hagelberg to be apertured, as Sorrell teaches, so that the surface area of the apertures provide an abrasive surface for cleaning.

***Allowable Subject Matter***

9. Claims 13-14, 17-18, 24-36 are allowed.

10. The following is a statement of reasons for the indication of allowable subject matter: None of the prior art made of record includes a handle having an internal cavity, a lower opening, a radial opening, an actuator having a projection, a connecting rod linked to the projection, a jaw linked to the rod, two positions that clamp a brush head, and further a handle having teeth that extend radially into the cavity and a connecting rod that has radially outwardly extending teeth.

Furthermore, none of the prior art of record includes a first end of a brush head comprising of a plurality of layers of a water-degradable material positioned on top of each other to form a stack of layers, wherein at least two of the layers are formed from a

Art Unit: 1744

sheet of the water-degradable material that has been folded back upon itself, and wherein the head is configured such that a first end of the stack is held together and an opposed end of the stack can spread out between at least two of the layers, and having an axially extending notch or wherein top and bottom layers of the stack are not impregnated with a surfactant while a plurality of layers between the top and bottom layers are impregnated with a surfactant.

Furthermore, none of the prior art of record includes a wand for holding a brush head, the wand including a handle with an internal cavity, a lower opening, a radial opening, an actuator having a projection extending through the radial opening, a connecting rod linked to the projection which is mounted in the handle cavity, and two jaws linked to the rod which extend out the handle lower opening, and wherein the wand has been attached to a separately formed extension, the extension having a hangar hole or wherein the jaw has an axially extending tongue projection suitable to interfit with a brush head having an axial notch.

### ***Response to Arguments***

11. Applicant's arguments, filed 27 December 2005, with respect to the rejection(s) of claim(s) 2-10, 12, 15-16, 19-21, and 45-47 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Allaire et al., Young, and Marquart et al.

### ***Conclusion***


Art Unit: 1744

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura C. Guidotti whose telephone number is (571) 272-1272. The examiner can normally be reached on Monday-Thursday, 7:30am - 5pm, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on (571) 272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LCG  
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GLADYS J.P. CORCORAN  
PRIMARY EXAMINER